### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



## LOUIS ENTEN NEUTRA DE COMPENSANT EN LES PROPRESENTATION DE CONTRA CONTRA CONTRA CONTRA CONTRA CONTRA CONTRA CO

(43) International Publication Date 8 January 2004 (08.01.2004)

**PCT** 

## (10) International Publication Number WO 2004/003151 A2

(51) International Patent Classification7:

C12N

(21) International Application Number:

PCT/US2003/020207

(22) International Filing Date: 26 June 2003 (26.06.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/391,738

26 June 2002 (26.06.2002) US

60/440,498

16 January 2003 (16.01.2003) US

- (71) Applicant (for all designated States except US): BIO-GEN, INC. [US/US]; 14 Cambridge Center, Cambridge, MA 02142 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHIANG, Gisela [US/US]; 4 Cottage Street, Belmont, MA 02478 (US). SISK, William [US/US]; 280 Joseph Road, Boxborough, MA 01719 (US).
- (74) Agent: CREASON, Gary, L.; Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142 (US).

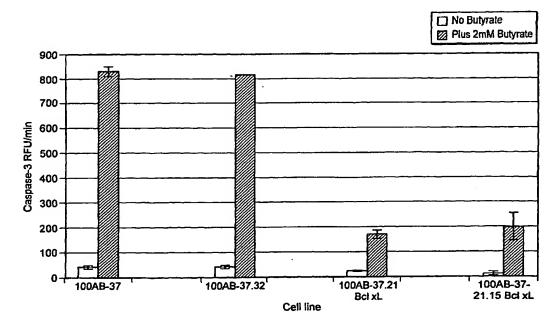
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- without international search report and to be republished upon receipt of that report
- with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROTEIN PRODUCTION METHODS AND MODIFIED CELLS FOR USE THEREIN



(57) Abstract: Disclosed are cells having an increased amount of Bcl-x<sub>L</sub> protein and their use in protein production.

